

ABSTRACT OF THE DISCLOSURE

The present invention provides a method for processing tone scale of a digital color image in which the histogram of tone scales (for example, of RGB, $Y C_r C_b$, Lab or Luv) is considered for deciding the semi-S curve. The semi-S curve suits the digital color image and improves the brightness contrast and color saturation for the image output device. A weighting procedure can also be used for compensating those high occurrence colors in the image, and rearrange and analysis the histogram of tone scale, so as to decrease the influence of the high occurrence colors to the calculation and process of tone scale.